United States Environmental Protection Agency

Region 6 Enforcement and Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	February 28 - March 1, 2019	
Media:	Air	
Regulatory Program(s)	Clean Air Act Section 112(r) and 40 C.F.R. Part 68 Chemical Accident Prevention Provisions (Risk Management Program)	
Company Name:	**ExxonMobil Corporation**	
Facility Name:	**ExxonMobil Refining & Supply - Baton Rouge**	
Facility Physical Location:	4045 Scenic Highway	
(city, state, zip code)	Baton Rouge, Louisiana 70805	
Mailing address:	4999 Scenic Highway	
(city, state, zip code)	Baton Rouge, Louisiana 70805	
County/Parish:	East Baton Rouge Parish	
Facility Contact:	Michael Betbeze	Risk Management SLS
	michael.l.betbeze@exxonmobil.com	
FRS Number:	110043804185	
Identification/Permit Number:	Air Operating Permit ID: 2589	
Media Number:	RMP Number: 100000091768	
NAICS:	32411 (Petroleum Refineries)	

Personnel participating in inspection:			
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EPA Lead Inspector Signature/Date	Kayla Buchanan Kayla Buchanan		4/24/2019 Date
Supervisor Signature/Date	Samuel Tates Samuel Tates		4/24/2019 Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

The United States Environmental Protection Agency (EPA) Region 6 inspectors Justin McDowell and Kayla Buchanan; United States Environmental Protection Agency (EPA) HQ inspector Joseph Varco; Eastern Research Group inspectors Dan Roper and Tyler Nelson (contractors for USEPA); and the Louisiana Department of Environmental Quality (LDEQ) Chemical Accident Prevention Program inspectors Keri Meyers, Karley Vinson, Cliff Acosta and Glen Jenkins arrived at the ExxonMobil Baton Rouge facility at 9:00 AM on Monday February 25, 2019, for an announced inspection. This inspection included both the ExxonMobil Baton Rouge Chemical Plant (XOM BR Chemical Plant) February 25-27, 2019 and the ExxonMobil Baton Rouge Refinery (XOM BR Refinery) on February 28 – March 1, 2019. We met with Michael Betbeze (Risk Management SLS/ facility contact) and other ExxonMobil personnel listed in Table 1 for an opening meeting.

Justin, Dan, Tyler and I presented our credentials and informed ExxonMobil personnel that this was an EPA inspection to determine compliance with the facility's Chemical Accident Prevention Program. The scope of the inspection was a partial compliance evaluation (PCE), which included an evaluation of the facility's compliance with the Clean Air Act (CAA) Section 112(r) and the Chemical Accident Prevention Provisions in 40 C.F.R. Part 68 as well as the CAA General Duty Clause.

This report will evaluate compliance at the ExxonMobil Baton Rouge Refinery. A separate report will be produced to evaluate the chemical plant, despite overlap in several regulatory elements. The XOM BR Refinery is listed as a Program Level three (3) process facility. Prior to the inspection, I inquired if an employee representative was available pursuant to section 112(r)(6)(L) of the CAA to participate in this inspection and I met with the Union 1312 representatives Keith Cashio (President) and Bradley Vines who represent both the chemical plant and refinery.

Table 1: Opening Meeting Attendance, Monday February 25, 2019

NAME	POSITION
Justin McDowell	Inspector
Kayla Buchanan	Inspector
Joseph Varco	Inspector
Tyler Nelson	Inspector
Dan Roper	Inspector
Keri Meyers	Inspector
Karley Vinson	Inspector
Cliff Acosta	Inspector
Glen Jenkins	Inspector
Michael Betbeze	Risk Management SLS

Sue Rosenthal	Attorney
Michelle Smith	Process Supervisor
Jarvis B. Hays	Process STL
Bradley E. Vines	USW Safety Officer (Union)
Joey Rinauoo	Personnel Safety SLS
Ernesto Johnson	Chemical Plant Superintendent
Robert Berg	State Regulatory Advisor
James Carlton	Safety, Security, Health, Environmental Manager
Bryant Bremer	Senior Counsel
Ryan Lazor	Safety Coordinator
Chris Gauthier	Chief Inspector
Keith Cashio	Union President

FACILITY DESCRIPTION

The XOM BR Refinery, located in Baton Rouge, Louisiana employs approximately 1268 full time employees and operates a variety of processes to produce petroleum products (e.g., propane, butane, gasoline products, jet fuels, diesel fuels and coke) from raw crude oil. The refinery has several regulated flammables, such as propane, butane, etc.

Section II – OBSERVATIONS

Upon arrival at the facility, we reviewed the facility's safety orientation and safety procedures at the security office. During the course of the inspection, the inspection team took several site tours that consisted of both driving and walking tours.

The following observations for each Risk Management Plan (RMP) element/subpart was reviewed by various members of the inspection team. Each element/subpart was delegated to a responsible party in the inspection team which is detailed in table 2 below. A second report will be issued and will contain a separate Eastern Research Group (ERG) independent report that discusses additional findings and observations made on site.

Table 2

Section	Title	Responsibility	Personnel
68.12 - .15	Management System	EPA	Justin McDowell
68.20	Applicability	ERG	Justin McDowell
68.22 - .33	OCA	ERG	Dan/Tyler
68.65	PSI	ERG	Dan/Tyler
68.67	PHA	ERG	Dan/Tyler
68.69	Operating Procedures	EPA	Justin McDowell
68.71	Training	EPA	Kayla Buchanan
68.73	MI	ERG	Dan/Tyler
68.75	MOC	ERG	Dan/Tyler
68.77	PSSR	ERG	Dan/Tyler
68.79	Compliance Audits	EPA	Justin/Kayla
68.81	Incident Investigations	EPA	Dan/Tyler
68.83	Employee Participation	EPA	Joseph Varco
68.85	Hot Work Permit	EPA	Joseph Varco
68.87	Contractors	EPA	Joseph Varco
68.90 - .95	Emergency Response	EPA	Justin/Kayla
Subpart G	Risk Management Plan	EPA	Justin/Kayla

Subpart A – General

40 C.F.R. § 68.10 Applicability

The XOM BR Refinery is the owner or operator of a stationary source that has more than a threshold quantity of regulated toxic and flammable substances, listed in 40 C.F.R. § 68.130, in a process and is subject to the Chemical Accident Prevention Provisions. XOM BR Refinery has a CAA Title V permit along with an Air Operating Permit: 2589 for their Petroleum Refinery processes (32411). XOM BR Refinery is subject to the Occupational Safety and Health Administrations process safety management (PSM) standard, 29 C.F.R. § 1910.119, and has Program Level three (3) processes.

40 C.F.R. § 68.12 General requirements

The XOM BR Refinery re-submitted an RMP based on the 5-year update requirement (40 CFR 68.190(b)(1)) on June 19, 2014. This re-submission listed a covered process containing regulated toxic and flammable chemicals. This requires XOM BR Refinery to develop and implement a management system, conduct a hazard assessment, implement the prevention requirements of 40 C.F.R. § 68.65 - § 68.67, develop and implement an emergency response program, and submit the data elements from 40 C.F.R. § 68.175 in their RMP.

40 C.F.R. § 68.15 Management

The XOM BR Refinery uses the Operations Integrity Management System (OIMS) as a structured approach for managing the safety, health, security and environmental risk at the facility. OIMS consists of many programs, procedures, practices, and manuals that assist in the day to day operations at the facility and is used to assist in various sections of the RMP regulations. OIMS is separated into 11 elements, with each element being owned by a XOM BR Refinery subject matter expert. The OIMS elements include the following: OIMS 1.1 Management Leadership, Commitment and Accountability; OIMS 2.1 Risk Assessment and Analysis; OIMS 3.1 Facilities Design and Construction; OIMS 4.1 Process and Facilities Information / Documentation; OIMS 5.2 Occupational Health; OIMS 5.4 Training; OIMS 6.1 Operations and Maintenance Procedures; OIMS 6.2 Work Permits; OIMS 6.3 Critical Equipment; OIMS 6.4 Mechanical Integrity; OIMS 7.1 Management of Change; OIMS 8.1 Third Party Services; OIMS 9.1 Incident Reporting Analysis and Follow up; OIMS 10.1 Emergency Preparedness; and OIMS 11.1 Assessment and Improvement. XOM BR Chemical has developed a management system to oversee the implementation of risk management program elements. XOM BR Chemical assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of each of the risk management program elements. XOM BR Chemical's OIMS documentation defined responsible parties of higher-level supervisors and I was later provided with the "2014 / 2017 External PSM/RMP Review Assignments" that listed RMP element topics with an assigned assessor during the Compliance Audits.

Subpart B – Hazard Assessment

40 C.F.R. § 68.20 Applicability

The XOM BR Refinery is a program level three (3) stationary source subject to this subpart. The XOM BR Refinery is required to prepare an offsite consequence analysis and complete the five-year accident history.

40 C.F.R. § 68.22 Offsite Consequence Analysis Parameters – detailed in ERG report

40 C.F.R. § 68.25 Worst-case Release Scenario Analysis – detailed in ERG report

40 C.F.R. § 68.28 Alternative Release Scenario Analysis – detailed in ERG report

40 C.F.R. § 68.30 Defining Offsite Impacts - Population – detailed in ERG report

40 C.F.R. § 68.33 Defining Offsite Impacts - Environment – detailed in ERG report

40 C.F.R. § 68.36 Review and Update – detailed in ERG report

40 C.F.R. § 68.39 Documentation – detailed in ERG report

40 C.F.R. § 68.42 Five-year accident history – detailed in ERG report

Subpart D – Program 3 Prevention Program

40 C.F.R. § 68.65 Process Safety Information – detailed in ERG report

40 C.F.R. § 68.67 Process hazard analysis (PHA) – detailed in ERG report

40 C.F.R. § 68.69 Operating Procedures

I discussed The XOM BR Refinery's implementation of operating procedures. The facility uses a computer-based repository (vault database) for operating procedures. The only hard copy paper procedures are kept for emergency control operations. The vault database is under the Superintendent's control and has a set frequency in which procedures are daily updated. Any changes made to operating procedures are delegated to two individuals. Changes begin with the business team for red line and technical basis of changes; followed by printing and peer reviewed by the two leads to assure the accuracy and maintain consistent formatting; then the Management of Change (MOC) normal process steps before finalization to be published and updated in vault. After completion, the procedure coordinator will replace existing procedures with the new procedure. Operating procedures have a two-step check and balances system. First, procedures are annually certified by the business team. Second, the XOM BR Refinery has a 5-year process to review and complete a full re-write by subject matter experts to then replace as the new procedure. Each control room has one dedicated computer to view operating procedures in the event of network loss. The lockout/ tagout procedures are also electronic safety standard procedures that are accessed by the Manual Central database. Such safety standard procedures are site wide. I then toured the ALKY control room with Michelle Smith (Day Superintendent) to view the Honeywell TDC system as well as review selected operating procedures. The following procedures were reviewed: ALAX- East/ West Train Drying with Isobutane (ALKY-SU-0304) Shutdown; ALAX- Refrigeration Drying with Isobutane (ALKY-SU-0305) Start-up; and ALAX-T-1 Tower Start-up (ALKY-SU-0324). The hard copy emergency procedures were kept in a red binder with corresponding P&IDs. Prior to the inspection, I requested the annual certifications of all operating procedures in RMP-covered processes for the last 3 years. I reviewed the BRCX Operating Procedure Certifications for 2016, 2017 and 2018 in addition to the Annual Verification Survey for 2016, 2017 and 2018. Of the 17 annual verification surveys reviewed onsite, two were found to be beyond the annual (365-day) certification period: VLE (April 4, 2016 and May 10, 2017), PCLA 2/3 (April 12, 2016 and May 16, 2017). **[AOC 1]**

40 C.F.R. § 68.71 Training

The ExxonMobil training coordinator oversees training for both the refinery and chemical plant. Each new operator receives basic operator training which consists of nine weeks of classroom training. The operator then progresses to field training which requires the operator to complete several different modules and culminates with a final field interview. Upon passing the field interview, the operator is deemed qualified.

The regulation requires that each employee presently operating a process and each employee newly assigned to a covered process to be trained or tested to be competent in the operating procedures provided that pertain to their duties. I reviewed training records for six randomly selected employees to ensure that initial training was documented and that each employee involved in operating processes received and understood the training.

The regulation requires refresher training to be provided at least every three years, and more often if necessary, to each employee operating a process to ensure that the employee understands and adheres

to the current operating procedures of the process. Refresher training is issued to operators through the web based application, WebCAT. Topics are covered every thirty-six months. Of the six randomly selected employees, all received refresher training as required.

I spoke with the training coordinator to determine how the complex handles employees who do not complete refresher training in a timely manner. She explained that employees overdue for refresher training cannot work their post and pay is docked until the employee completes his or her training.

The regulation requires the owner or operator, in consultation with the employees operating the process, to determine the appropriate frequency of refresher training. I spoke with two employees who were content with the frequency of training, but wanted more one-on-one classroom training, as well as designated time to complete trainings; according to these two employees, operators must multi-task and do their regular job while completing training, which distracts them from retaining the information being presented.

40 C.F.R. § 68.73 Mechanical Integrity – detailed in ERG report

40 C.F.R. § 68.75 Management of Change (MOC) – detailed in ERG report

40 C.F.R. § 68.77 Pre-startup Safety Review – detailed in ERG report

40 C.F.R. § 68.79 Compliance Audits

The XOM BR Refinery does a plant-wide comprehensive compliance audit. The facility provided their two most recent Compliance Audits (November 11-18, 2014 and November 7-14, 2017). Each audit is conducted with internal ExxonMobil staff from the Baton Rouge facility as well as subject matter experts from other ExxonMobil facilities. The 2014 and 2017 Compliance audits combined yielded one finding that was tracked to completion in their "eMOC" program.

40 C.F.R. § 68.81 Incident Investigation – detailed in ERG report

40 C.F.R. § 68.83 Employee Participation

The facility appears to have a written plan of action regarding the implementation of the employee participation required under §68.83. We were told that employees have access, via a company intranet, to documents including:

- materials of construction,
- piping and instrument diagrams,
- electrical diagrams,
- relief system design bases,
- applicable design codes and standards, and
- material and energy balances.

There is also a system in place whereby employees are consulted on the development of process safety related elements. We were told that relevant employees will participate in the development of process hazards analyses (PHA) and other PSM elements. We were told that, for the conduction of HAZOPs, a

coordinator will collect areas of concern from applicable parties. All members of the HAZOP team play an active role in data collection, hazard(s) identification, risk assessment, and final report generation.

Union representative, Mr. Bradley Vines told us that typically the most knowledgeable people are pulled to participate on HAZOPs and other related elements; their participation will typically last for four weeks, but this varies from unit to unit. Reports are accessible via the intranet, and employees/ contractors can also ask for reports and findings from process supervisors. He notes that the HAZOPs and related documents are available in a system called the Operation Integrity Management System (OIMS).

40 C.F.R. § 68.85 Hot Work Permit

Both the Chemical Plant and the Refinery appear to have a system in place whereby hot work permits are issued for hot work operations conducted on or near covered processes. It is the policy of the facility to retain hot work permits for seven days post-completion of the work. Per document 2018-RMPCP-003048, the facility requires a hot work permit to be in place and a Work Permission Book to be used to prepare work sites to hot work standards.

No hot work permits were reviewed for the Refinery, as there had been no recent hot work reported at or near the alkylation unit.

40 C.F.R. § 68.87 Contractors

The inspection team spoke with Mr. Ron Williams, an individual who oversees contractors at the facilities. Mr. Williams informed us that the facility maintains a list of recommended companies/ contractors; when needed, the facility can consult the list and select an appropriate contractor. If there are issues with a given contractor, the contractor may be removed from the list. He told us that issues including safety and performance are cause for a contractor to be removed from the approved list. Prior to commencing work at the facility, a contractor will undergo site-orientation training. Upon request, we reviewed a transcript of the site-orientation as well as the “start-of-job checklist”; these appeared to be comprehensive, covering items including safety, potential fire and explosion hazards, site-security and badging procedures, etc.

Access to the facility is controlled, and this is well-documented in the site-orientation material; contractors are informed that the facility entrances, their presence, and exiting of the facility are all controlled.

We were further informed by Mr. Williams that there is an annual auditing of contractor safety performance. Contractors are also periodically evaluated on their ability to fulfill their obligations.

During the site-orientation, contractors receive a “start-of-job” checklist. This document describes the hazards found at the facility, safety precautions, SHE elements, work-permitting, chemical handling safety, electrical/rigging/machinery-specific issues, emergency action plan, etc. We were told by Mr. Williams that there is an annual recertification using this checklist. Work permits are issued specific to

the work process in which the contractor(s) will be working. At the completion of this orientation and checklist, contractors are issued cards.

We reviewed documentation, including 2019-RMPCP-13000020 and 2018-RMPCP-001840, which supported that the performance of contractors are periodically assessed, and there are systems in place to document near-misses, as well as root-cause analyses, contractor vehicle-permitting, and drug/alcohol testing. We reviewed records of site-orientation and "start-of-job" checklists, which confirmed that these are documented, recorded, and retained.

Subpart E – Emergency Response

40 C.F.R. § 68.90 Applicability

The ExxonMobil facility complex is designated as a "first responder" in case of an accidental release of regulated substances.

40 C.F.R. § 68.95 Emergency Response Program

The ExxonMobil facility operates with approximately 250 volunteer and 5 paid employees. ExxonMobil trains employees in fire, rescue, hazmat and medical emergency response activities. Once trained, the employees have a wide range of capabilities as they are self-reliant to handle exterior, interior, confined space and high angle incidents. Shifting teams of process responders conduct drills once per month at the Superintendent's request; mechanical teams drill quarterly. The facility is represented by and is chair of the Baton Rouge mutual aid and participates in the Local Emergency Planning Committee. The facility is equipped with four fire trucks, an ambulance and dedicated rescue trucks with monitoring equipment. In addition, the facility has on staff two doctors, two nurses and a Nurse Practitioner who work on site and are available on-call in case of emergency. ExxonMobil has an embedded contractor "Total Safety" who conducts inspections and maintains all emergency response equipment onsite.

Subpart G – Risk Management Plan

40 C.F.R. § 68.190 Updates

The XOM BR Refinery re-submitted an RMP based on the 5-year update requirement (40 CFR 68.190(b)(1)) on June 19, 2014.

40 C.F.R. § 68.195 Required corrections

The XOM BR Refinery next RMP re-submission is due by June 19, 2019, unless an update or correction is required by 40 C.F.R. §68.190 and 40 C.F.R. §68.195.

Closing Meeting – A joint closing meeting was held on March 1, 2019 to discuss Areas of Concern, recommendations and the process of completing the inspection report.

Table 3: Closing Meeting Attendance, Friday March 1, 2019

NAME	POSITION
Justin McDowell	Inspector
Kayla Buchanan	Inspector
Joseph Varco	Inspector
Tyler Nelson	Inspector
Dan Roper	Inspector
Keri Meyers	Inspector
Cliff Acosta	Inspector
Glen Jenkins	Inspector
Michael Betbeze	Risk Management SLS
Ryan Lazor	Employee Safety
Chris Gauthier	Chief Inspector
Jimmy Carlton	SSHE Manager
Bryant Bremer	Senior Counsel
Robert Berg	State Regulatory Advisor
Bradley E. Vines	Union Safety Officer

Section III – AREAS OF CONCERN

AOC 1 – 40 C.F.R § 68.69 (c) Operating Procedures

"§68.69 (c) (c) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate."

Of the 17 annual verification surveys reviewed onsite, three were found to be beyond the annual (365-day) certification period: VLE (April 4, 2016 and May 10, 2017), PCLA 2/3 (April 12, 2016 and May 16, 2017).

Additional areas of concern will be detailed in the attached ERG report.

Section IV – FOLLOW UP

On March 19, 2019 and April 15, 2019, EPA received additional document request subsequent to the closing of the inspection on March 1, 2019.

Section V – Appendices

Appendix 1 – ERG Report